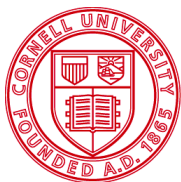




Lake Erie Regional Grape Program



Cornell University
Cooperative Extension



PennState Extension

Crop Update May 2, 2019



2019
New York and Pennsylvania Pest
Management Guidelines for
Grapes

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In this Crop Update:

- e-NEWA
- WPS Inspections
- Loaner Sensor Program
- Grape Flea Beetle & Climbing Cutworm
- North East PA Update
- Respirator Fit Information
- Seeder Loaner Program
- Specialty Fruit Survey
- 2019 Coffee Pot Schedule

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The Lake Erie Regional Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extensions in Chautauqua, Erie and Niagara county NY and in Erie County PA.

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Dave Pieczarka
315.447.0560

IPM

Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

eNEWA for Grapes – Back by Popular Demand!

What is eNEWA you ask? eNEWA is a daily reminder of the current weather and grape disease and insect model information found on NEWA (Network for Environment and Weather Applications) <http://newa.cornell.edu>. This daily email contains current weather and grape pest model information from a station, or stations, near you. The email will contain; 1) high, low and average temperature, rainfall, wind speed and relative humidity 2) the 5-day forecast for these weather parameters, 3) GDD totals (Base 50F), 4) 5-day GDD (Base 50F) forecast and 5) model results for powdery mildew, black rot, Phomopsis and grape berry moth.

eNEWA is a great way to get an idea of pest potentials for your vineyard operation without having to click around the NEWA website every day. eNEWA is not meant to be a replacement for the website, rather it is a quick and easy way to determine if a visit to the website is warranted. For example, if one of the pest models is reporting the potential for an infection event, you can visit the NEWA website to provide information specific to your site. This will increase the accuracy of the output of the disease and grape berry moth models. You will also need to access the NEWA website to use the DMCAst model for downy mildew as user input is required.

We worked with Dan Olmstead, NEWA Coordinator, to streamline the sign up process for eNEWA in 2019. By visiting [NEWA: Choose Your Station](#) you will have the ability to choose from any station that is currently part of the NEWA network in New York and Pennsylvania. You can choose to receive information from one to five station locations and have the information delivered up to three times a day. Please keep in mind that you will receive a separate email (approximately 3 pages in length) for each station you choose. Once during the growing season and again after harvest, you will be asked to complete a short survey to assist us in improving the eNEWA for grapes email system. If you would like to be a part of this project visit [NEWA: Choose Your Station](#). eNEWA alerts should start shortly after the growing season begins.

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2019 New York and Pennsylvania Pest Management Guidelines for Grapes Now Available

The Pesticide Management Education Program (PMEP) at Cornell University is pleased to announce the availability of the 2019 New York and Pennsylvania Pest Management Guidelines for Grapes.

Written by Cornell and Penn State University specialists, this publication is designed to offer producers, seed and chemical dealers, and crop consultants practical information on growing and managing grapes in New York State and Pennsylvania. Topics include an overview of pesticide use and pest management in grapes; managing common grape disease, insect, and weed concerns; and sprayer technology. A preview of the Grape Guidelines can be seen online at <https://cropandpestguides.cce.cornell.edu>.

Highlighted changes in the 2019 Grape Guidelines include:

- Updated pesticide options for economically important grape pests.
- Revised guidance on botrytis, downy mildew, grape mealybug, and soft scales.

Cornell Crop and Pest Management Guidelines are available as a print copy, online-only access, or a package combining print and online access. The print edition of the 2019 Grape Guideline costs \$31 plus shipping. Online-only access is \$31. A combination of print and online access costs \$43.50 plus shipping costs for the printed book.

The Grape Guidelines can be obtained through your local Cornell or Penn State Cooperative Extension office or from the Cornell Store at Cornell University. To order from the Cornell Store, call (844) 688-7620 or order online at [Cornell Bookstore](https://www.cornellbookstore.com).



Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

Are You Ready For a NYSDEC or PDA WPS/PPE Inspection?

Growing grapes in the Lake Erie American Viticulture Area definitely has its challenges. If you look at viticulture world-wide there are fewer places that are more difficult to grow grapes profitably than in our region. We live in a cool, humid climate with damaging low temperatures in the winter, disease due to humidity, and dealing with international economics and market pressures within short growing seasons. There is little wiggle room for profitability, therefore we need to keep money in our pockets whenever we can. One way to do that is to be ready for a WPS/PPE Inspection to avoid fines.

The Lake Erie Regional Grape Program and the National Grape Cooperative Association collaborated to bring New York State Department of Conservation approved course instructor, Michael Nierenberg, to present Worker Protection Standard (WPS) for Agricultural Pesticides and Personal Protection Equipment (PPE) Training Course to the Lake Erie Region. The goal is to reduce the risks of pesticide poisonings, injuries and exposure among Workers and Handlers on farms and to keep our grape growers, pesticide applicators, handlers and workers compliant and up to date with the required WPS/PPE standards.

Per the Environmental Protection Agency (EPA), the WPS requires owners and employers on agricultural establishments and commercial pesticide handling establishments to protect employees on their farms from occupational exposure to agricultural pesticides. The three basic principles of WPS are to Inform, Protect, and Mitigate Exposures.

The Inform Principle pertains to pesticide safety training, pesticide safety information, pesticide application and hazard information, notification, and information exchange. Protect Principle training included discussions on exclude workers and others from treated area, exclude workers from the Application Exclusion Zone, the minimum age of handler or early entry workers, and PPE. The third Basic Principle of WPS was to Mitigate Exposures through use of decontamination supplies, eyewash water, and emergency assistance. There were key changes made to the EPA How-To-Comply Manual document may be accessed and downloaded from the PERC and EPA websites at:

PERC: [Pesticide Educational Resources Collaborative](#)

EPA: [United States Environmental Protection Agency](#)

Okay, so you already know that if you are handling pesticides on your farm, you must comply with safety standards; not just for your own safety but for that of anyone on or around your farm. So why the article? **The answer to that question is: Enforcement.**

The NYSDEC is the regulatory entity for Enforcement of the pesticide law, which is necessary for the protection of public health and the environment, and is also necessary for legal and economic reasons. In keeping with these principles, the primary pesticide enforcement policy objectives of DEC are:

1. Demand strict compliance;
2. Establish an enforcement presence; and
3. Be consistent in imposing sanctions for non-compliance.

As some of you may recall, a few years back the DEC's focused enforcement efforts that brought in teams of DEC Pesticide, OSHA and EPA members from outside the region to inspect our area. This is a common practice within the state and done on a rolling basis. Are you prepared for an inspection? Are your handlers or employees prepared for the three-page list of questions that the inspectors are required to ask?

These Worker Safety Protecting inspections by the DEC shall demand and, whenever necessary, compel through the enforcement process, strict compliance with all applicable requirements mandated by law.

One measure of the success of DEC's pesticide program is its effectiveness in ensuring that pesticides are properly used. To effectuate these goals, a regulatory scheme has been established to promote compliance with pesticide law. Enforcement action is appropriate to compel compliance and to penalize improper conduct.

The circumstances warranting the imposition of significant payable penalties for Business, Applicator and Use Offense are stated in the table below located on the [DEC's website](#).

See Table on next page:

Being out of compliance is serious and violations could be costly, therefore it's best to be in compliance. This training course review directed pesticide applicators and handlers in the right direction to Worker Protection Standards and Personal Protection Equipment usage. Pesticides are valuable tools in the production of agricultural commodities. However, improperly used, pesticides can injure health, property and the environment. Please refer to the NYSDEC website and links provided in this update to be certain that you are in compliance with regulations to keep everyone safe and money in your pocket. If you have any questions about compliance, it was stated at our training event that the NYSDEC welcomes phone calls and does not generate inspections based off of your inquiries. **Be Prepared for an Inspection!**

Business, Applicator and Use Offense	
Violation Type	Minimum Penalty Level
Failure to obtain business or agency registration.	\$1,000 for first offense, plus \$100 for each additional offense or different product.
Failure to obtain applicator certification or to comply with applicator supervision, where required.	\$1,000 per year or portion thereof, per person.
Sale of a restricted use pesticide to a person not certified.	\$1,000 per incident.
Possession of a restricted use pesticide by a person not certified, nor acting as the agent of a certified applicator.	\$1,000 per incident.
Failure to provide notification.	\$1,000 per violation.
Violation of commercial lawn care, contract requirements or visual notification marker requirements.	\$1,000 per violation of requirement or condition.
Pesticide misuse including unlawful application, storage or disposal of pesticide (3)(4)(5).	<p>No known property damage, or environmental damage, or exposure: \$1,000;</p> <p>Property damage or environmental damage or unknown exposure: \$2,000;</p> <p>Known human or animal exposure: \$3,500;</p> <p>Human injury: \$5,000.</p>
Violation of seizure, stop use, or quarantine order.	\$3,000 per incident.
Failure to obtain aquatic permit.	\$1,000 per incident.
Failure to comply with aquatic permit conditions.	\$500 per condition or incident.
Lack of equipment I.D.	\$200 per violation.
Record keeping	\$250 per violation.
Failure to file business annual report.	\$1,000 per report.
Failure to use back flow prevention equipment or technique.	\$1,000 per violation.
Failure to provide appropriate personal protective equipment to employee.	\$1,000 per violation.
Failure to provide required training to employee.	\$1,000 per violation.

Research

CLEREL

Loaner Sensor Program Available at LERGP

There is variation present to some degree within all vineyards. Perhaps there is a low spot that succumbs to frost damage every year or an area with poor drainage, maybe there is a suspected insect pest. Regardless of the cause, it can be beneficial for growers to understand how wide spread the issue is. Efficient Vineyard is all about reducing vineyard variation through the use of sensors. Data collected through the use of sensors can be used to create data driven maps which provide more detailed insight into the overall state of the vineyard.

For members of the Lake Erie Regional Grape Program there are sensors available for use this growing season, free of cost, through the loaner sensor program. A technician for the Efficient Vineyard Project will bring sensors out to your vineyard and attach them to equipment for the grower to scan the vineyards themselves. Sensors are usually attached to a piece of equipment, such as a sprayer, so that data can be collected during normal vineyard operations like pesticide application. This reduces the additional time necessary to gain access to a useful tool with a variety of applications.

After the scanning data is collected a technician will return to remove the scanners and retrieve the data from the data logger. The grower will be contacted after our GIS specialist creates a map showing the differences in relative canopy growth or patterns of soil variation across the vineyard block using the geo-referenced data. This can then be brought in to our viticulturist to discuss the variation, if any, and assist in developing data-driven management plans to increase efficiency and productivity.

For more information on the Loaner Sensor program, check out efficientvineyard.com or call the Lake Erie Regional Grape Program office at (716) 792-2800.



PA Update

Andy Muza, LERGP Extension Educator, Penn State University

In the Vineyard (5-2-19)

Another season has started. Concords are in the bud swell stage and we conducted our first Coffee Pot meeting yesterday at the Mason Farm in Lake City, PA.

Now is the time (bud swell stage) that you should be scouting for 2 pests that feed on grape buds – grape flea beetle and climbing cutworm.

Grape flea beetle – also called steely beetle, these insects are small (3/16”) and metallic blue in color (Figure 1). Beetles overwinter in the adult stage and emerge as grape buds begin to swell. The most significant injury caused by this pest is due to adults feeding on swollen grape buds, often consuming enough tissue to destroy the developing bud (Figure 2). By about 1/2” growth the threat of economic loss from this pest is over. Larvae feed on leaves but the extent of injury is usually negligible. The largest populations of flea beetles are most often around wooded or overgrown edges of vineyards. Scout vineyard rows bordering these areas frequently during the bud swell stage. Look for injured buds along canes and presence of adults. Beetles will jump like fleas when disturbed. Warm, sunny days are usually the best opportunity to observe adults. Areas with bud injury of 2% or greater would warrant an insecticide treatment. ([Grape Flea Beetle fact sheet](#))



Figure 1. Adult Grape Flea Beetle. Photo: <https://ecommons.cornell.edu/handle/1813/43101>



Figure 2. Flea beetle injured grape bud. Photo: <https://ecommons.cornell.edu/handle/1813/43101>

Climbing Cutworm – several species of cutworm larvae feed on grape buds during the swell stage (Figure 3). The injury to buds can be confused with grape flea beetle damage. The larvae are immature stages of noctuid moths. Larvae have a brown to gray coloration with darker stripes or dots along the body. Larvae hide under stones or weeds beneath vines during the day and climb vines to feed at night. Vineyards

with weed cover under the trellis and areas with sandy soils are at greater risk for injury. Scout frequently during the bud swell stage. If bud injury is detected then examine weeds/soil beneath vines for presence of larvae. Areas with bud injury of 2% or greater would warrant an insecticide treatment.

([Climbing Cutworm fact sheet](#))

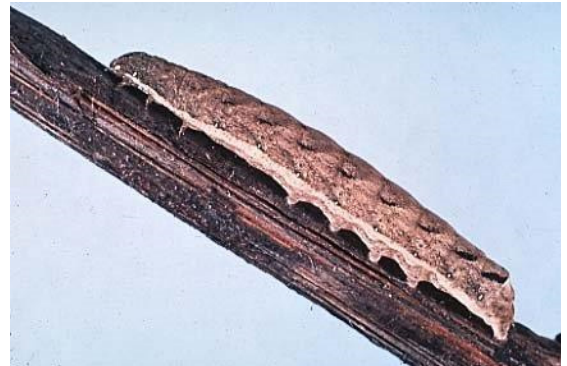


Figure 3. Spotted Cutworm Larva. Photo: <https://ecommons.cornell.edu/handle/1813/43085>

PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

Weather: Low temps over last weekend and into Monday morning, were flirting with the freezing mark in several places across the Lake Erie grape belt. In fact, below freezing temperatures were recorded for most sites at the eastern end of the grape belt with extremes at places like Versailles and Hanover; 7-8 hours below freezing on Monday morning, lows around 27/28 F, according to NEWA. I suspect temperatures got even lower than that in some frost pocket areas. Here on the west end of the belt, temperatures stayed mostly just above freezing at sites where NEWA stations were located. With buds still unopened (late swell in most places at that time?), I would not expect any damage to buds.

We accumulated 5.74" of precipitation in April at our site in North East by the Lake, which is well above our long-term average of about 3.4", and the second wettest April in at least the past 20 years. We recorded 54.1 growing degree days (gdds) during April, somewhat below average.

Phenology: Here by the lake, Somerset (our earliest table grape variety) is poised for budbreak. Elvira, Niagara, and Concord buds are at late bud swell with at least 10% pink, but no budbreak yet. Farther inland, vineyards are generally farther along and are breaking bud, especially after temps peaked in the 80s on May 1.

Diseases: The first disease we should be concerned about is Phomopsis. Early spring rains release spores of the Phomopsis fungus that emanate from cane lesions (from shoot infections that occurred last year) and from older and dead wood in the trellis (from infections that occurred two or more seasons ago). New shoots are vulnerable to infection just after shoot growth begins. Inflorescences are generally first vulnerable a little later at about 2-3" of shoot growth, when they first become exposed. That is why the first spray of mancozeb for Phomopsis is generally timed to intercept that 3-5" shoot stage. But in broader terms for early shoot infections, that's a ballpark figure. In other words, if you see a long, wet forecast timed to hit at 1-2" (like in 2017 when virtually every Concord vine in the belt was nailed with Phomopsis), you may want to at least try to cover your vineyards most at risk first. If temperatures are really warm, shoots will move from 2" to 3" while you're filling your spray tank anyway. Last year, the rains at about 1-2" shoots left a new "crop" of Phomopsis lesions on the first couple of nodes/internodes because we were waiting for 3-5" again, which, relative to the weather, was too late. Fortunately, as in 2017, the rains hit before maximum exposure of inflorescences and most of the damage was observed as shoot lesions as opposed to cluster stem lesions, minimizing crop loss.

Save the date for your next fit test!

Western New York

Locations:

May 14: Amos Zittel & Sons, 3275 Webster Road,
Eden, NY 14057

May 15-16: CCE Lake Erie Regional Grape Program,
6592 West Main Road, Portland, NY 14769



Scheduling appointments:

Monday, April 15-Friday, May 10



The **New York Center for Agricultural Medicine and Health (NYCAMH)** and **HealthWorks** is pleased to provide respirator fit testing clinics in your region in 2019.

During the clinics NYCAMH will provide **medical evaluations**; **respirator fit tests**; and **WPS compliant trainings** on how to properly inspect, put on, take off, fit, seal check, use, clean, maintain, and store respirators.

Clinic appointments are **one hour long**, and groups of **4 workers** can be seen at a time. Medical evaluations, fit tests, and trainings are available in both **English and Spanish**.

If you are unable to attend the clinic in your area you may schedule an appointment at another clinic location.



Bassett Healthcare Network
New York Center for Agricultural
Medicine and Health



Bassett Healthcare Network
HealthWorks

Save the date for your next fit test!

To schedule an appointment please call the NYCAMH office during the **date range listed above** and ask to speak with farm respirator clinic scheduler.



We can be reached at **607-547-7014** or toll-free **800-343-7527**

Monday-Friday, 8:00 AM-4:30 PM

When calling to schedule an appointment please have the following information available:

- *Total number of people attending from your farm*
- *Name of each person being scheduled*
- *Language spoken by each attendee*
- *Make and model of each respirator to be tested*

A respirator fit test ensures that a particular make, model, and size of respirator fits the wearer's face and will meet the wearer's needs. A fit test is specific to the make, model, and size of respirator.

If a worker wears more than one style of respirator, including filtering facepieces, they must be fit tested for each one. Please keep in mind while determining who will come to the clinic that a clean-shaven face is a necessity for masks to be effective and for fit testing to be possible.

It is important to us that your workers be protected from any respiratory hazards. It is important to us that you be protected from potential OSHA or DEC fines. If you have any questions, please call us.

Seeder Loaner Program: For Vineyard Use

Purpose: Cover crops can be a useful tool in improving soil physical, chemical, and biological properties. The purpose of this no-till seeder loaner program is for grape growers to gain experience with cover crop seeding in their own vineyard operations.

The Cornell Lake Erie Research and Extension Laboratory acquired this five-foot seeder from Chautauqua County Soil and Water and our intent is to loan out the implement at no charge to Lake Erie Regional Grape Program members for vineyard use. Since this is a no-fee program, we need to minimize the burden on CLEREL staff. We ask that you pick up and drop off the seeder by your own means, operate the equipment as if it were your own, and return it in good working order.

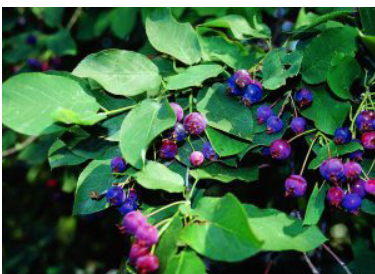
Thank you for your cooperation in this program for your fellow growers. If the seeder becomes abused, broken, or unsafe to operate, the CLEREL Director will discontinue the program.

Criteria:

- Must be a member of the LERGP
- To be used in Vineyards for moderate amounts of acreage
- Maximum 3 days/ use
- Must pick up and return by own means- we do not deliver or pick up
- Must return in same working condition as picked up

Procedure-

Grower will call LERGP and schedule a time to come get the seeder. Once here, grower will inspect the equipment and, if needed, attain basic instructions of use for the seeder. A profile sheet will be filled out to gather grower information and signed agreeing on terms. Upon return of the equipment, an inspection of condition will occur.



Specialty Fruit Survey: Are you interested in diversifying your farmers market, farm stand, or CSA offerings with specialty fruit crops? Have you ever thought about growing currants, kiwiberries, goji berries, beach plums, or other “unusual” fruits? Tell us about it! We are gauging grower interest in specialty fruit crops. Your input will help guide a project that aims to develop growing recommendations and enterprise budgets for unusual fruit crops in New York. Fill out our online survey by clicking on the following link:
[SURVEY](#)



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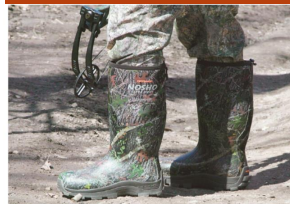
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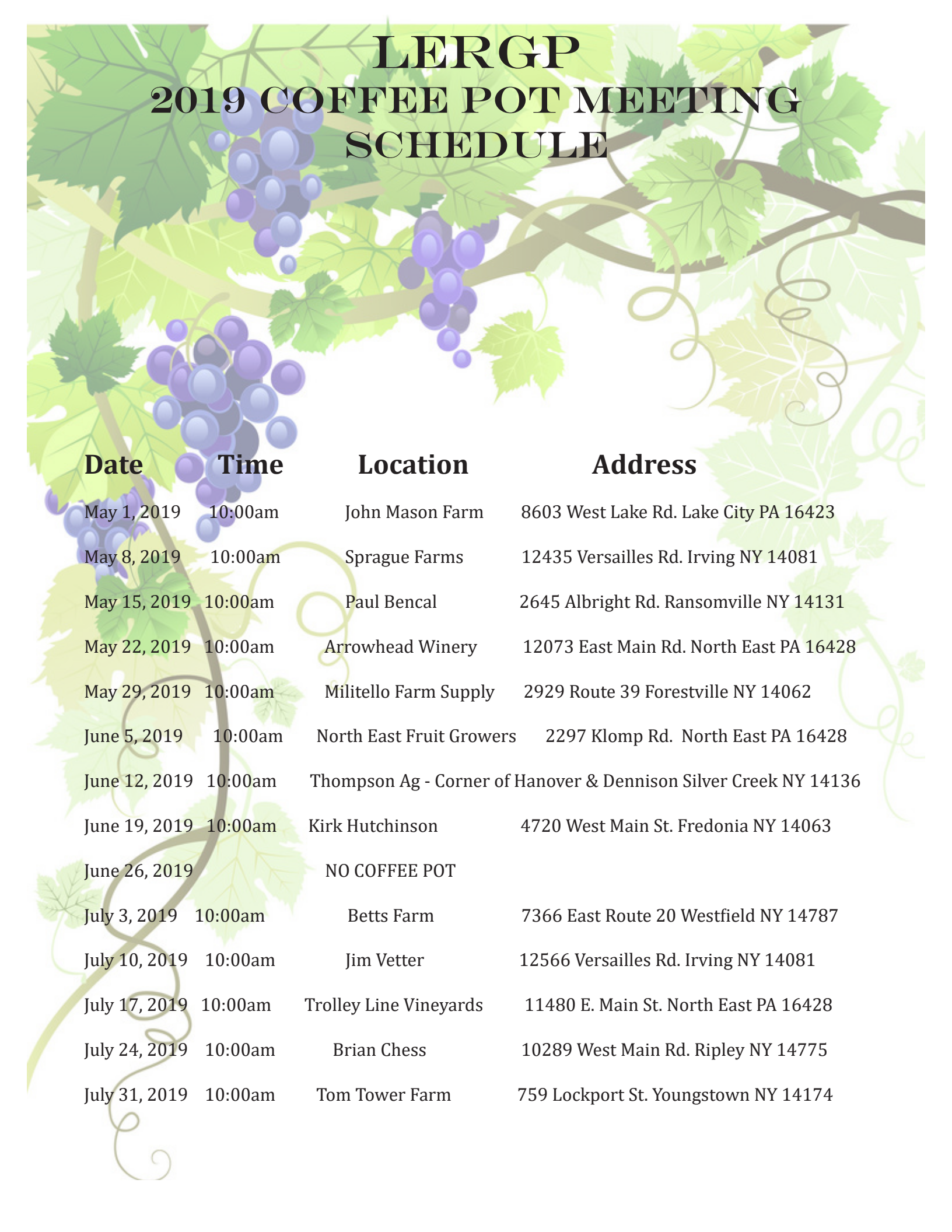


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LERGP 2019 COFFEE POT MEETING SCHEDULE

Date	Time	Location	Address
May 1, 2019	10:00am	John Mason Farm	8603 West Lake Rd. Lake City PA 16423
May 8, 2019	10:00am	Sprague Farms	12435 Versailles Rd. Irving NY 14081
May 15, 2019	10:00am	Paul Bencal	2645 Albright Rd. Ransomville NY 14131
May 22, 2019	10:00am	Arrowhead Winery	12073 East Main Rd. North East PA 16428
May 29, 2019	10:00am	Militello Farm Supply	2929 Route 39 Forestville NY 14062
June 5, 2019	10:00am	North East Fruit Growers	2297 Klomp Rd. North East PA 16428
June 12, 2019	10:00am	Thompson Ag - Corner of Hanover & Dennison	Silver Creek NY 14136
June 19, 2019	10:00am	Kirk Hutchinson	4720 West Main St. Fredonia NY 14063
June 26, 2019		NO COFFEE POT	
July 3, 2019	10:00am	Betts Farm	7366 East Route 20 Westfield NY 14787
July 10, 2019	10:00am	Jim Vetter	12566 Versailles Rd. Irving NY 14081
July 17, 2019	10:00am	Trolley Line Vineyards	11480 E. Main St. North East PA 16428
July 24, 2019	10:00am	Brian Chess	10289 West Main Rd. Ripley NY 14775
July 31, 2019	10:00am	Tom Tower Farm	759 Lockport St. Youngstown NY 14174